WHAT IS CLAIMED IS:

1. An iron core of a rotating-electric machine, comprising:

laminated magnetic plate strips;

a cylindrical core proximal portion;

a plurality of teeth projecting in a substantially radial direction from the proximal portion; and

slots for accommodating a winding that are located between the teeth adjacent to each other,

wherein the iron core is fabricated by curving both end portions of a substantially hexahedral laminate so that the core proximal portion obtains a predetermined curvature, forming the entire laminate into a cylindrical shape by wrapping it around a cylindrical core member so that distal ends of the teeth project from the core proximal portion, and joining both end portions.

2. An iron core of a rotating-electric machine according to Claim 1, wherein both end portions of the core proximal portion of the laminate have a lower rigidity than that of the remainder thereof.

3. An iron core of a rotating-electric machine according to Claim 2, wherein both end portions of the core

proximal portion of the laminate are provided with thinner portions that are thinner in a radial direction so as to have a lower rigidity.

4. An iron core of a rotating-electric machine according to Claim 3, wherein a filling member for making a diameter of a circumferential end of the core proximal portion identical to that of the remainder is welded to the thinner portions.

5. An iron core of a rotating-electric machine according to Claim 2, wherein both end portions of the core proximal portion of the laminate are formed so that the diameters of the circumferential end portions of the core proximal portion become smaller toward ends thereof so as to reduce the rigidities thereof.

6. An iron core of a rotating-electric machine according to Claim 2, wherein both end portions of the core proximal portion of the laminate are provided with at least one notch at the circumferential end of the core proximal end so as to reduce the rigidities thereof.

7. An iron core of a rotating-electric machine according to Claim 1, wherein the iron core is formed by

curving a single substantially hexahedral laminate.

8. A manufacturing method for an iron core of a rotating-electric machine, the iron core including laminated magnetic plate strips, a cylindrical core proximal portion, a plurality of teeth projecting in a substantially radial direction from the core proximal portion, and slots for accommodating a winding that are located between the teeth adjacent to each other, the manufacturing method comprising:

an end portion curving step for curving both end portions of a substantially hexahedral laminate so that the core proximal portion obtains a predetermined curvature;

a body curving step for curving the entire laminate into a cylindrical shape by wrapping it around a cylindrical core member so that distal ends of the teeth project from the core proximal portion; and

a joining step for joining both end portions of the laminate.

9. A manufacturing method for an iron core of a rotating-electric machine according to Claim 8, wherein the laminate is clamped between a first fixing jig disposed at the core proximal portion and a second fixing jig disposed on the teeth such that the end portions project by a predetermined length, and the end portions of the laminate

are curved by pressing the end portions in a direction in which the teeth project by a pressing jig in the end portion curving step, an end portion of the second fixing jig that is adjacent to the teeth being provided with an arc or linear slope that becomes farther from the teeth toward an end thereof.

10. A manufacturing method for an iron core of a rotating-electric machine according to Claim 8, wherein the laminate is clamped between a first fixing jig disposed at the core proximal portion and a second fixing jig disposed at the teeth such that the end portions project by a predetermined length, and a closely contacting jig having an L-shaped section is placed in close contact with a corner on the core proximal portion of the end of the laminate, and the end portions of the laminate are curved using the closely contacting jig such that they are wrapped toward the teeth, an end portion of the second fixing jig that is adjacent to the teeth being provided with an arc or linear slope that becomes farther from the teeth toward an end thereof.

11. A manufacturing method for an iron core of a rotating-electric machine according to Claim 8, wherein the iron core is formed by curving a single laminate

having a substantially hexahedral shape; and

the body curving step includes;

a first body curving step in which a central portion of the laminate is clamped, and both end portions of a predetermined length from ends are curved by being wrapped around a cylindrical core member, and

a second body curving step in which the curved portions that have been formed in the first step are clamped and a remaining central portion is curved by being wrapped around the core member.

12. A manufacturing method for an iron core of a rotating-electric machine constructed by laminated magnetic plate strips, a cylindrical core proximal portion, a plurality of teeth projecting in a substantially radial direction from the core proximal portion, and slots for accommodating a winding that are formed between the teeth adjacent to each other, the manufacturing method comprising:

a body curving step for wrapping a central portion of a laminate around a cylindrical core member to form the laminate into a cylindrical shape such that distal ends of teeth project from the core proximal portion;

an end portion curving step for clamping the laminate, which has been curved in the body curving step, at inner and outer peripheries except end portions thereof, and curving

the end portions of the laminate by pressing or wrapping the end portions toward the inner periphery thereof; and

a joining step for joining both end portions of the laminate.

13. A manufacturing method for an iron core of a rotating-electric machine according to Claim 8, further comprising a step for accommodating the winding in the slots of the substantially hexahedral laminate before at least the body curving step; and

the body curving step is implemented with the winding accommodated in the slots.

14. A manufacturing method for an iron core of a rotating-electric machine according to Claim 8, wherein the body curving step is carried out while at least a part of the core proximal portion of the laminate is being slidably guided from both sides.

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